**Term Project #1 Resolution Proof System**

0016046

conversion start

KB

{

Forall X Forall Y [WantToKill(X,Y) & Jedi(Y) => ! Jedi(X)]

to

C1 ! WantToKill(X,Y) | ! Jedi(Y)

Forall X [CanUseForce(X) <=> Jedi(X) | Sith(X)]

to

C2 [ ! CanUseForce(X) | Jedi(X) | Sith(X)] & [ ! Jedi(X) | CanUseForce(X)] & [ ! Sith(X) | CanUseForce(X)]

Forall X Forall Y [StudentOf(X,Y) & CanUseForce(Y) => CanUseForce(X)]

to

C3 ! StudentOf(X,Y) | ! CanUseForce(Y) | CanUseForce(X)

C4 StudentOf("AnakinSkywalker","ObiWan")

C5 WantToKill("AnakinSkywalker","ObiWan")

C6 Jedi("ObiWan")

}

Negated Query

{

C7 ! Sith("AnakinSkywalker")

}

conversion end

proof & unification start

C2+C7 with unifiers {C2.X/C7."AnakinSkywalker"}

C8 [ ! CanUseForce("AnakinSkywalker") | Jedi("AnakinSkywalker")] & [ ! Jedi("AnakinSkywalker") | CanUseForce("AnakinSkywalker")]

proof & unification end